

**IN THE CLAIMS**

1. (Cancelled)

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Cancelled)

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Cancelled)

10. (Cancelled)

11. (Original) A method comprising:

identifying a defect location and a defect type for each of at least two defects on a semiconductor wafer;

determining a chemical composition of each of the at least two defects;

preparing a wafer defect map to visually represent the defect location and the defect type for each of the at least two defects; and

statistically representing the at least two defects with at least one visual aid.

12. (Original) The method according to claim 11, further comprising, for each of the at least two defects, placing a marking on the wafer defect map that corresponds to the defect location.

13. (Original) The method according to claim 12, wherein placing a marking comprises using a marking that is color-coded based upon the defect type.

14. (Original) The method according to claim 11, wherein identifying a the defect location and the defect type comprises using an optical or scanning electron microscope.

15. (Original) The method according to claim 11, wherein determining a chemical composition comprises performing an AES analysis on each of the at least two defects.

16. (Original) The method according to claim 11, wherein statistically representing the at least two defects comprises constructing a table having columns corresponding to the defect type, the chemical composition, a defect cause, and the defect location.

17. (Original) The method according to claim 11, wherein statistically representing the at least two defects comprises preparing a bar graph that represents the at least two defects according to the defect type.

18. (Original) The method according to claim 11, wherein preparing the wafer defect map and statistically representing the at least two defects is performed electronically.

19. (Original) The method according to claim 18, wherein identifying a the defect location and the defect type, and determining a the chemical composition of each of the at least two defects is also performed electronically.

20. (Original) The method according to claim 11, further comprising analyzing the at least one visual aid to determine appropriate corrective action in a wafer fabrication process.

21. (Cancelled)